

Transmittal Note

#### **SUPPLEMENT TO**

# ANNEX 8 — AIRWORTHINESS OF AIRCRAFT

# (Eighth Edition)

- 1. The attached Supplement supersedes all previous Supplements to Annex 8 and includes differences to the Annex notified by Contracting States before 21 January 1999.
- 2. This Supplement should be inserted at the end of Annex 8 (Eighth Edition). Additional differences received from Contracting States will be issued at intervals as amendments to this Supplement.

\_\_\_\_

#### SUPPLEMENT TO ANNEX 8 — EIGHTH EDITION

# AIRWORTHINESS OF AIRCRAFT

Differences between the national regulations and practices of Contracting States and the corresponding International Standards contained in Annex 8, as notified to ICAO in accordance with Article 38 of the *Convention on International Civil Aviation* and the Council's resolution of 21 November 1950.

#### RECORD OF AMENDMENTS

No.	Date	Entered by	No.

No.	Date	Entered by
		_

# AMENDMENTS TO ANNEX 8 ADOPTED OR APPROVED BY THE COUNCIL SUBSEQUENT TO THE EIGHTH EDITION ISSUED IN JULY 1988

No.	Date of adoption or approval	Date applicable
96	22/3/94	10/11/94
97	12/3/97	6/11/97; 12/3/2000

No.	Date of adoption or approval	Date applicable

#### 1. Contracting States which have notified ICAO of differences

The Contracting States listed below have notified ICAO of differences which exist between their national regulations and practices and the International Standards of Annex 8 (Eighth Edition), or have commented on implementation.

The page numbers shown for each State and the dates of publication of those pages correspond to the actual pages in this Supplement.

	Date of	Pages in	Date of
State	Notification	Supplement	publication
Azerbaijan	31/7/97	1	21/1/99
Belize	30/6/97	1	21/1/99
Bhutan	21/8/98	1	21/1/99
Botswana	30/4/97	1	21/1/99
Cyprus	28/11/97	1	21/1/99
Ethiopia	4/3/97	1	21/1/99
Georgia	28/8/98	1	21/1/99
Ghana	7/5/97	1	21/1/99
Jamaica	18/8/97	1	21/1/99
Japan	9/10/97	1-2	21/1/99
Lebanon	12/11/97	1	21/1/99
Lithuania	18/8/97	1	21/1/99
Niger	1/5/98	1	21/1/99
Norway	11/7/97	1	21/1/99
Oman	6/3/98	1	21/1/99
Paraguay	11/6/98	1	21/1/99
Romania	23/10/98	1	21/1/99
Slovakia	8/8/97	1	21/1/99
South Africa	1/9/98	1	21/1/99
Spain	24/12/98	1	21/1/99
Suriname	17/4/97	1	21/1/99
Sweden	8/7/97	1	21/1/99
Uganda	25/2/97	1	21/1/99
United Kingdom	23/10/97	1	21/1/99
United Republic of Tanzania	26/1/98	1	21/1/99
United States	21/10/97	1-2	21/1/99

#### 2. Contracting States which have notified ICAO that no differences exist

State	Date of Notification	State	Date of notification
Argentina	2/10/97	Germany	12/9/97
Australia	10/3/98	Ireland	8/2/98
Barbados	3/9/97	Monaco	18/6/97
Cameroon	15/9/97	Namibia	22/7/97
Canada	30/9/97	Netherlands	6/3/98
Chile	4/7/97	Russian Federation	1/10/97
Cuba	11/7/97	Saudi Arabia	7/7/97
Finland	10/9/97	Tunisia	16/8/97

# 3. Contracting States from which no information has been received

Afghanistan Greece Palau Albania Grenada Panama

Algeria Guatemala Papua New Guinea

Angola Guinea Peru
Antigua and Barbuda Guinea-Bissau Philippines
Armenia Guyana Poland
Austria Haiti Portugal
Bahamas Honduras Qatar

Bahrain Hungary Republic of Korea
Bangladesh Iceland Republic of Moldova

Belarus India Rwanda Belgium Indonesia Saint Lucia

Benin Iran (Islamic Republic of) Saint Vincent and the Grenadines

Bolivia Iraq Samoa Bosnia and Herzegovina Israel San Marino

Brazil Italy Sao Tome and Principe

Brunei Darussalam Jordan Senegal Bulgaria Kazakhstan Seychelles Burkina Faso Sierra Leone Kenya Burundi Kiribati Singapore Slovenia Cambodia Kuwait Cape Verde **Kyrgyzstan** Solomon Islands

Central African RepublicLao People's Democratic RepublicSomaliaChadLatviaSri LankaChinaLesothoSudanColombiaLiberiaSwazilandComorosLibyan Arab JamahiriyaSwitzerland

Congo Luxembourg Syrian Arab Republic

Cook IslandsMadagascarTajikistanCosta RicaMalawiThailand

Côte d'Ivoire Malaysia The former Yugoslav Republic of

CroatiaMaldivesMacedoniaCzech RepublicMaliTogoDemocratic People's Republic ofMaltaTonga

Korea Marshall Islands Trinidad and Tobago

Democratic Republic of the Congo Mauritania Turkey
Denmark Mauritius Turkmenistan
Djibouti Mexico Ukraine

Dominican Republic Micronesia (Federated States of) United Arab Emirates

Ecuador Mongolia Uruguay Morocco Uzbekistan Egypt Mozambique El Salvador Vanuatu Equatorial Guinea Myanmar Venezuela Eritrea Viet Nam Nauru Estonia Nepal Yemen Fiii New Zealand Zambia France Nicaragua Zimbabwe

Gabon Nigeria
Gambia Pakistan

# 4. Paragraphs with respect to which differences have been notified

Paragraph	Differences notified by	Paragraph	Differences notified by
General	Japan South Africa	4.2.8	South Africa United Kingdom
	South Fifted		United Republic of Tanzania
PART I		4.2.9 5.1	United Kingdom Ghana
Definitions	Japan United States	6.2.1	United Republic of Tanzania
		6.2.2 7	Azerbaijan Bhutan
PART II			Botswana Ghana
2.2	Azerbaijan Belize	8	South Africa Jamaica
	Bhutan Botswana	-	
	Cyprus Ethiopia	PART III	
	Georgia Ghana	Chapter 1	
	Lebanon	1.1.3 1.5.1	United States United States
	Lithuania Niger Paraguay	1.5.1	United States
	Romania Slovakia	Chapter 2	
	Suriname Uganda	2.2.3	United States
3.1	Azerbaijan Belize	Chapter 4	
3.2	Azerbaijan	_	Consideration of the constant
1.1	Belize Azerbaijan	4.1.6 b) 4.1.6 g)	Spain Japan
	Belize Niger		Norway Sweden
1.2.2 1.2.3	United Kingdom Azerbaijan	4.1.6 h)	Japan Norway
	Cyprus Niger		Spain Sweden
1.2.4	United States South Africa	4.1.6 i)	Norway Sweden
	United Kingdom		Sweden
.2.5	Bhutan Oman South Africa	Chapter 9	
	United Republic of Tanzania	9.3.5	Japan United Kingdom
1.2.6 1.2.7	United Kingdom United Kingdom United States	9.5	Jamaica

Danaguanh	Differences notified by	Paragraph	Differences notified by
Paragraph	notified by	— Paragraph	notified by
Chapter 10		2.2.3.1	Japan United States
10.1	Ghana	2.2.3.1.1	Japan United States
		2.2.3.1.2	Japan
Chapter 11	Norway		United States
	Sweden	2.2.3.1.3	Japan
11.1	Japan		United States
	Spain	2.2.3.1.4	Japan
11.2	Japan		United States
	Spain	2.2.3.2	Japan
11.3	Japan		United States
	Spain	2.2.3.3	Japan
		2.2.3.3.1	Japan
			United States
PART IV			
Chapter 1		Chapter 4	
1.2, Note 1	United States	4.1.6 e)	United States
		Chapter 6	
Chapter 2		6.3.2	Japan
2.2.1	Japan		
2.2.2	United States Japan	Chapter 7	
۷.۷.۷	United States	7.4.2	United States

PA	RT	П

2.2	A comprehensive and detailed national airworthiness code is not implemented.
3.1	The issuance of a certificate of airworthiness is not implemented.
3.2	Rendering valid the original certificate of airworthiness is not implemented.
4.1	The determination of the continuing airworthiness of an aircraft is not implemented.
4.2.3	Mandatory continuing airworthiness information is not implemented.
6.2.2	The determination of the airworthiness of an aircraft that has sustained damage is not implemented.

2.2	A national code of airworthiness is not implemented.
3.1	Proof of compliance with appropriate airworthiness requirements is not implemented.

3.2 Proof of compliance with appropriate airworthiness requirements is not implemented.

4.1 The determination of the continuing airworthiness of aircraft is not implemented.

21/1/99

- 2.2 A national code of airworthiness is not implemented.
- 4.2.5 There is no system for reporting faults, malfunctions and defects.
- 7 There is no standard form of Certificate of Airworthiness.

- 2.2 A comprehensive and detailed national airworthiness code is not implemented.
- Provisions concerning the information to be contained in the certificate of airworthiness are only partially implemented.

- 2.2 A comprehensive and detailed national airworthiness code is not implemented.
- 4.2.3 Mandatory continuing airworthiness information is not implemented.

2.2 A national code of airworthiness is not implemented.

\_\_\_\_

2.2 A national airworthiness code is not implemented.

2.2 A national airworthiness code is not implemented.

5.1 Not implemented.

7 Not implemented.

# PART III

# **Chapter 10**

10.1 Ghana has no provisions concerning maintenance information.

8 Aircraft flight manuals regarding aircraft limitations are not implemented.

# PART III

# Chapter 9

9.5 Aeroplane flight manuals are not implemented.

#### General

Japanese airworthiness requirements are basically equivalent to those stipulated in the United States Federal Aviation Regulations. Furthermore, the schedule for the full implementation of all the provisions of Annex 8, up to and including Amendment 97, has not been determined yet.

#### PART I

#### **Definitions**

*Performance Class 1, 2 and 3 helicopters.* Large helicopters (heavier than 2 730 kg) are classified as either Category TA or TB on the basis of weight and performance capabilities. There is no classification scheme for all other helicopters (2 730 kg or less).

#### **PART III**

#### Chapter 4

- 4.1.6 g) Fire suppression systems do not take into account fires caused by explosive or incendiary devices.
- 4.1.6 h) Design precautions are taken to protect against cabin depressurization and against the presence of smoke and toxic gases, except those caused by explosive or incendiary devices.

#### Chapter 9

9.3.5 Identification of a least-risk bomb location is not required.

#### Chapter 11

- 11.1 Japan has no requirement for the provision of a least-risk bomb location.
- 11.2 Japan has no such requirement.
- 11.3 Japan has no such requirement.

#### PART IV

#### Chapter 2

2.2.3.1.4

- 2.2.1 As stated in the difference with respect to the definitions of classes of helicopters in Part I, classifications in our country are based on weight as well as performance.
- 2.2.2 As stated in the difference with respect to the definitions of classes of helicopters in Part I, classifications in our country are based on weight as well as performance.
- 2.2.3.1 For Category TB helicopters, only take-off distance is required to be included in the performance data 2.2.3.1.1 while take-off distance, path and rejected take-off distance information is required for Category TA helicopters. There are no comparable requirements for helicopters weighing less than 2 730 kg. 2.2.3.1.3
- 2.2.3.2 En-route performance is based solely on climb performance for both all-engines operating and one engine inoperative situations (Category TA/TB). There are no comparable requirements for helicopters weighing less than 2 730 kg.

2 JAPAN	SUPPLEMENT TO ANNEX 8 (EIGHTH EDITION)
2.2.3.3	The landing decision point (LDP) is required for Category TA helicopters only.
2.2.3.3.1	The landing decision point (LDP) is required for Category TA helicopters only.
Chapter 6	
6.3.2	Installation of rotor overspeed warnings is not required with respect to any category of helicopters.

2.2 A detailed code of airworthiness is not implemented.

2.2 A national airworthiness code is not implemented.

- 2.2 A national code of airworthiness is not implemented.
- 4.1 Provisions concerning the determination of the continuing airworthiness of aircraft are not implemented.
- 4.2.3 Mandatory continuing airworthiness information is not implemented.

# Chapter 4

- 4.1.6 g), h) and i) JAR 25 is the adopted airworthiness code in Norway. Norway participates in JAA working groups and will adopt changes to this code when properly agreed.
- Chapter 11 JAR 25 is the adopted airworthiness code in Norway. Norway participates in JAA working groups and will adopt changes to this code when properly agreed.

4.2.5 There are no provisions for the transmission of information regarding faults, malfunctions and defects to the organization responsible for the type design.

21/1/99

2.2 A national airworthiness code has not been fully implemented.

2.2 A national airworthiness code is not implemented.

2.2 A national airworthiness code is not implemented.

4.2.4	There are no provisions concerning the transmission to the State of Design of all mandatory continuing airworthiness information.
4.2.5	There are no provisions concerning the transmission of information on malfunctions and defects to the organization responsible for type design.
4.2.8	There are no provisions concerning the type of service information to be reported.
7	There is no standard form of Certificate of Airworthiness.

#### **Chapter 4**

- 4.1.6 b) Spanish regulations read "critical aeroplane systems required for flight".
- 4.1.6 h) This paragraph is superfluous since the effect of decompression is dealt with elsewhere, irrespective of the possible cause.

#### Chapter 11

- 11.1 Spain has no plans to incorporate provisions concerning the identification of a least-risk bomb location.
- Spain has no plans to incorporate security-related provisions concerning weapons and explosives.
- Spain has no plans to incorporate security-related provisions concerning weapons and explosives

2.2 A national code of airworthiness is not implemented.

# Chapter 4

- 4.1.6 g), h) and i) JAR 25 is the adopted airworthiness code in Sweden. Sweden participates in JAA working groups and will adopt changes to this code when properly agreed.
- Chapter 11 JAR 25 is the adopted airworthiness code in Sweden. Sweden participates in JAA working groups and will adopt changes to this code when properly agreed.

2.2 A national code of airworthiness is not implemented.

\_\_\_\_

4.2.2 British Civil Aviation Regulations (BCARs) do not make a clear distinction between the State of Design and the State of Manufacture. 4.2.4 Mandatory information is contained in CAA documents CAP 473 and CAP 474. These are distributed to States upon request. Since our distribution is not automatic, we do not therefore ensure transmission to the State of Design. In practice we do distribute to many States. 4.2.6 British Civil Aviation Regulations (BCARs) do not make a clear distinction between the State of Design and the State of Manufacture. 4.2.7 British Civil Aviation Regulations (BCARs) do not make a clear distinction between the State of Design and the State of Manufacture. 4.2.8 British Civil Aviation Regulations (BCARs) do not make a clear distinction between the State of Design and the State of Manufacture.

British Civil Aviation Regulations (BCARs) do not make a clear distinction between the State of

#### **PART III**

4.2.9

#### Chapter 9

9.3.5 A least-risk bomb location on the aeroplane is not required to be identified.

Design and the State of Manufacture.

21/1/99

- 4.2.5 In practice Tanzania requires mandatory reporting of faults, malfunctions, defects and other occurrences which cause or might cause adverse effects on continuing airworthiness for all aircraft irrespective of their maximum certificated take-off mass.
- 4.2.8 In practice Tanzania requires mandatory reporting of faults, malfunctions, defects and other occurrences which cause or might cause adverse effects on continuing airworthiness for all aircraft irrespective of their maximum certificated take-off mass.
- 6.2.1 No regulation is in place empowering the Authority to prevent an aircraft from resuming flight in cases of damage affecting its airworthiness. In practice, the Authority informs the State of Registry in such circumstances and relies on the operator to adhere to the regulations and practices of the State of Registry.

#### **Definitions**

*Performance Class 1, 2 and 3 helicopters.* Large helicopters (heavier than 6 000 lb) are classified as either Category A or B on the basis of weight, passenger-carrying capacity and auxiliary systems as well as performance capabilities. There is no classification scheme for all other helicopters (6 000 lb or less).

Standard atmosphere. The United States uses the U.S. Standard Atmosphere, 1962. This standard contains a sea-level molecular weight  $(M_0)$  of 28.9644 kg  $(kg-mol)^{-1}$ .

#### **PART II**

- 4.2.3 The United States does not generally issue Airworthiness Directives for non-type certificated aircraft. This includes foreign aircraft that are U.S.-registered, but operate under experimental rather than standard airworthiness certificates.
- 4.2.7 At this time, the United States does not require the continuing structural integrity programme to contain specific information concerning corrosion prevention and control.

*Remark:* The FAA expects to have regulations in effect that will assure compliance by December 1998. In the interim, the FAA will issue mandatory airworthiness information (airworthiness directives) to mandate such programmes as necessary.

#### **PART III**

#### Chapter 1

1.1.3 Effective 17 October 1979, the United States certificated certain aeroplanes at weights in excess of 5 700 kg (12 566 lb) that do not fully meet the ICAO Airworthiness Standards of Part III. The Airworthiness Certificate of aeroplanes that do not meet ICAO Standards will be endorsed as follows:

"This aeroplane at weights in excess of 5 700 kg does not meet the airworthiness requirements of ICAO, as prescribed by Annex 8 to the Convention on International Civil Aviation."

1.5.1 The United States also uses service experience and equivalent safety findings as a basis for finding compliance with the appropriate airworthiness requirements.

#### Chapter 2

2.2.3

This ICAO provision requires performance data to be scheduled for ranges of gradient of the landing surface for landplanes and ranges of water surface conditions, water density and current strength for seaplanes. For landplanes, the United States requires the landing distance to be determined only on a level runway. For seaplanes, the United States requires the landing distance on water to be determined only on smooth water. Operational take-off and landing distance margins are applied where appropriate by United States operational regulations and guidance.

#### **PART IV**

#### Chapter 1

1.2, Note 1 The United States does not allow the weight and centre of gravity limitations to vary as a function of altitude or phase of flight (take-off, cruise, landing, etc.).

Chapter 2	
2.2.1	As stated in the difference with respect to the definitions of classes of helicopters in Part I, United States classifications are based on other factors as well as performance.
2.2.2	As stated in the difference with respect to the definitions of classes of helicopters in Part I, United States classifications are based on other factors as well as performance.
2.2.3.1 2.2.3.1.1 2.2.3.1.2 2.2.3.1.3 2.2.3.1.4	For Category B helicopters, only take-off distance is required to be included in the performance data while take-off distance, path and rejected take-off distance information is required for Category A helicopters. There are no comparable requirements for helicopters weighing less than 6 000 pounds.
2.2.3.2	En-route performance is based solely on climb performance for both all-engines operating and one engine inoperative situations (Categories A and B). There is no comparable requirement for helicopters weighing less than $6000$ pounds.
2.2.3.3.1	The landing decision point (LDP) is required for Category A helicopters only.
Chapter 4	
4.1.6 e)	The United States does not provide criteria relative to the fire protection/prevention for interior furnishing materials replaced during major refurbishment. The fire protection levied is dependent on the original certification basis.
Chapter 7	
7.4.2	Minimum acceptable intensities are prescribed for navigation lights and anti-collision lights, i.e. no reduction below these levels is possible.